Notice of Allowability	Application No.	Applicant(s)	
	10/736,984	MURAKAMI ET AL.	
	Examiner	Art Unit	
	Chirag G. Shah	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *12/17/03*.

2. ☒ The allowed claim(s) is/are *1, 3-15 and 17-23; renumbered 1-21 respectively*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

CHIRAG G. SHAH
PRIMARY PATENT EXAMINER

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Lastova on 8/1/07.

The application has been amended as follows:

1. (Currently Amended) An output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein upon allocating a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, said controller is configured to manage~~manages~~ the basic volume of each flow of the packet belonging to the bandwidth-guaranteed class by individually allocating the basic volume by as much as the memory size required by each of the flows, and to manage the

basic volume of each of the flows of the packets belonging to the best-effort class by collectively allocating the memory size obtained by subtracting a sum of each the basic volume allocated to said bandwidth-guaranteed class from an entire memory size of said storage unit,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculates a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

2. Canceled.

3. (Currently Amended) An output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said controller is configured to allocate~~allocates~~ a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, ~~calculates~~calculate an excessively used volume of the packet to be transmitted relative to the basic volume of the flow based on an actual used volume of each of the flows by which the flow uses the storage unit, and ~~manages~~manage (a) flow information on only the flow that most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and

wherein upon receiving a packet belonging to a flow having an excessively used volume larger than the managed excessively used volume, said controller is configured to update~~updates~~ (a) the flow information and (b) the excessively used volume to (a) flow information on the flow to which the received packet belongs and (b) the excessively used volume of the flow thereof.

4. (Currently Amended) The output port circuit as claimed in claim 3,

wherein upon transmission of a packet belonging to a flow that most excessively uses the storage unit relative to the allocated basic volume from the router apparatus, said controller is configured to update~~updates~~ only the managed excessively used volume to the excessively used volume after transmission of the flow.

5. (Currently Amended) The output port circuit as claimed in claim 1,

wherein said controller is configured to calculate~~calculates~~ an excessively used volume relative to the basic volume of the flow of the packet to be transmitted based on an actual used volume of the flow by which the flow uses the storage unit, and manage~~manages~~ (a) flow information on only the flow that

most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and

wherein upon receiving a packet belonging to a flow and having an excessively used volume larger than the managed excessively used volume occurs, said controller is configured to update~~updates~~ (a) the flow information and (b) the excessively used volume to (a) flow information on the flow to which the newly received packet belongs and (b) the excessively used volume thereof.

6. (Currently Amended) The output port circuit as claimed in claim 5,

wherein upon transmission of a packet belonging to a flow that most excessively uses the storage unit relative to the allocated basic volume from the router apparatus, said controller is configured to update~~updates~~ only said managed excessively used volume to the excessively used volume after transmission of the flow.

7. (Currently Amended) An output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said controller further comprises a first management table memory ~~that stores~~ configured to store flow information on a flow to be

transmitted next to the flow for each of the flows to manage a flow transmission order upon storing a plurality of flows in said storage unit, and said controller is configured to update ~~updates~~ said first management table memory so as to designate an order of a new flow to be transmitted next to the flow before said currently transmitted flow upon storing the new flow to be transmitted in said storage unit,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculate a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

8. (Currently Amended) The output port circuit as claimed in claim 1,

wherein said controller further comprises a first management table memory that configured to store~~stores~~ flow information on a flow to be transmitted next to the flow for each of the flows to manage a flow transmission order upon storing a plurality of flows in said storage unit, and said controller is configured to update~~updates~~ said first management table memory so as to designate an order of a new flow to be transmitted next to the flow before said currently transmitted flow upon storing the new flow to be transmitted in said storage unit.

9. (Currently Amended) An output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said storage unit is divided to a plurality of blocks each having a predetermined block length, and said controller further comprises a first~~second~~ management table memory configured to store ~~that stores~~ information on one of the blocks which stores the packet and information on the other one of the blocks to be connected next to the block that stores the packet while making these information correspond to each other, thereby managing a packet connection state of each of the flows,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculate a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating

the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

10. (Original) The output port circuit as claimed in claim 1,

wherein said storage unit is divided to a plurality of blocks each having a predetermined block length, and said controller further comprises a second management table memory that stores information on one of the blocks which stores the packet and information on the other one of the blocks to be connected next to the block that stores the packet while making these information correspond to each other, thereby managing a packet connection state of each of the flows.

11. (Currently Amended) A router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said router apparatus comprising said output port circuit, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein upon allocating a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, said controller manages the basic volume of each flow of the packet belonging to the bandwidth-guaranteed class by

individually allocating the basic volume by as much as the memory size required by each of the flows, and manages the basic volume of each of the flows of the packets belonging to the best-effort class by collectively allocating the memory size obtained by subtracting a sum of each the basic volume allocated to said bandwidth-guaranteed class from an entire memory size of said storage unit,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculate a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

12. (Original) A router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said router apparatus comprising said output port circuit, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said controller allocates a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, calculates an excessively used volume of the packet to be transmitted relative to the basic volume of the flow based on an actual used volume of each of the flows by which the flow uses the storage unit, and manages (a) flow information on only the flow that most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and

wherein upon receiving a packet belonging to a flow having an excessively used volume larger than the managed excessively used volume, said controller updates (a) the flow information and (b) the excessively used volume to (a) flow information on the flow to which the received packet belongs and (b) the excessively used volume of the flow thereof.

13. (Currently Amended) A router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said router apparatus comprising said output port circuit, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said controller further comprises a first management table memory configured to ~~storethat stores~~ flow information on a flow to be transmitted next to the flow for each of the flows to manage a flow transmission order upon storing a plurality of flows in said storage unit, and said controller is configured to update~~updates~~ said first management table memory so as to designate an order of a new flow to be transmitted next to the flow before said currently transmitted flow upon storing the new flow to be transmitted in said storage unit,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculate a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

14. (Currently Amended) A router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said router apparatus comprising said output port circuit, said output port circuit comprising:

a storage unit for temporarily storing a packet to be transmitted; and

a controller for controlling storage and reading out of the packet into and from said storage unit,

wherein said storage unit is divided to a plurality of blocks each having a predetermined block length, and said controller further comprises a second management table memory configured to store ~~that stores~~ information on one of the blocks which stores the packet and information on the other one of the blocks to be connected next to the block that stores the packet while making these information correspond to each other, thereby managing a packet connection state of each of the flows,

wherein said controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculate a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

15. (Currently Amended) A method of controlling an output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of

continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said method including the following steps of:

temporarily storing in a storage unit a packet to be transmitted; and

controlling storage and reading out of the packet into and from said storage unit,

wherein upon allocating a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, said controlling step includes:

~~steps of~~ managing the basic volume of each flow of the packet belonging to the bandwidth-guaranteed class by individually allocating the basic volume by as much as the memory size required by each of the flows,

~~steps of~~ managing the basic volume of each of the flows of the packets belonging to the best-effort class by collectively allocating the memory size obtained by subtracting a sum of each the basic volume allocated to said bandwidth-guaranteed class from an entire memory size of said storage unit,

calculating a product of a priority and a number of flows belonging to a class for the each best-effort class,

calculating a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes,

calculating a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and

calculating the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

16. Canceled.

17. (Original) A method of controlling an output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said method including the following steps of:

temporarily storing in a storage unit a packet to be transmitted; and

controlling storage and reading out of the packet into and from said storage unit,

wherein said controlling step includes steps of allocating a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, calculating an excessively used volume of the packet to be transmitted relative to the basic volume of the flow based on an actual used volume of each of the flows by which the flow uses the storage unit, and managing (a) flow information on only the flow that most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and

wherein upon receiving a packet belonging to a flow having an excessively used volume larger than the managed excessively used volume, said controlling step further includes a step of updating (a) the flow information

and (b) the excessively used volume to (a) flow information on the flow to which the received packet belongs and (b) the excessively used volume of the flow thereof.

18. (Original) The method as claimed in claim 17,

wherein upon transmission of a packet belonging to a flow that most excessively uses the storage unit relative to the allocated basic volume from the router apparatus, said controlling step further includes a step of updating only the managed excessively used volume to the excessively used volume after transmission of the flow.

19. (Original) The method as claimed in claim 15,

wherein said controlling step further includes steps of calculating an excessively used volume relative to the basic volume of the flow of the packet to be transmitted based on an actual used volume of the flow by which the flow uses the storage unit, and managing (a) flow information on only the flow that most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and

wherein upon receiving a packet belonging to a flow and having an excessively used volume larger than the managed excessively used volume occurs, said controlling step further includes a step of updating (a) the flow information and (b) the excessively used volume to (a) flow information on the flow to which the newly received packet belongs and (b) the excessively used volume thereof.

20. (Original) The method as claimed in claim 19,

wherein upon transmission of a packet belonging to a flow that most excessively uses the storage unit relative to the allocated basic volume from the router apparatus, said controlling step further includes a step of updating only said managed excessively used volume to the excessively used volume after transmission of the flow.

21. (Currently Amended) A method of controlling an output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said method including the following steps of:

temporarily storing in a storage unit a packet to be transmitted; and

controlling storage and reading out of the packet into and from said storage unit,

wherein said output port circuit further comprises a first management table memory that stores flow information on a flow to be transmitted next to the flow for each of the flows to manage a flow transmission order upon storing a plurality of flows in said storage unit, and

wherein said controlling step further includes:

~~a step of~~ updating said first management table memory so as to designate an order of a new flow to be transmitted next to the flow before said currently transmitted flow upon storing the new flow to be transmitted in said storage unit.

calculating a product of a priority and a number of flows belonging to a class for the each best-effort class,

calculating a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes,

calculating a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and

calculating the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

22. (Original) The output port circuit as claimed in claim 15,

wherein said output port circuit further comprises a first management table memory that stores flow information on a flow to be transmitted next to the flow for each of the flows to manage a flow transmission order upon storing a plurality of flows in said storage unit, and

wherein said controlling step further includes a step of updating said first management table memory so as to designate an order of a new flow to be transmitted next to the flow before said currently transmitted flow upon storing the new flow to be transmitted in said storage unit.

23. (Currently Amended) A method of controlling an output port circuit of a router apparatus for routing and transmitting a packet received through an input port circuit to each of adjacent nodes through the output port circuit by a switch fabric circuit, each of flows being constituted by a plurality of

continuous packets and belonging to either one of a bandwidth-guaranteed class and a best-effort class, said method including the following steps of:

temporarily storing in a storage unit a packet to be transmitted; and

controlling storage and reading out of the packet into and from said storage means,

wherein said storage unit is divided to a plurality of blocks each having a predetermined block length,

wherein said output port circuit further comprises a second management table memory that stores information on one of the blocks which stores the packet and information on the other one of the blocks to be connected next to the block that stores the packet while making these information correspond to each other, said controlling step further including:

~~a step of~~ managing a packet connection state of each of the flows,

calculating a product of a priority and a number of flows belonging to a class for the each best-effort class,

calculating a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes,

calculating a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and

calculating the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class.

Reasons For Allowance

2. The following is an examiner's statement of reasons for allowance:

3. Regarding claims 1, 7, 9, 11, and 13-14, Prior art fails to disclose controller is configured to calculate a product of a priority and a number of flows belonging to a class for the each best-effort class, calculates a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculate a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculate the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class in combination with other limitations set forth in the respective claims.

Regarding claims 3 and 12, controller is configured to allocate a basic volume that is a criterion of a memory size which can be stored in said storage unit to each of the flows to which the packet to be transmitted belongs, calculate an excessively used volume of the packet to be transmitted relative to the basic volume of the flow based on an actual used volume of each of the flows by which the flow uses the storage unit, and manage (a) flow information on only the flow that most excessively uses said storage unit relative to said basic volume and (b) the excessively used volume thereof, and wherein upon receiving a packet belonging to a flow having an excessively used volume larger than the managed excessively used volume, said controller is configured to update (a) the flow information and (b) the excessively used volume to (a) flow information on the flow to which the received packet belongs and (b) the excessively used volume of the flow thereof in combination with other limitations set forth in the respective claim.

Regarding claims 14, 21 and 23, calculating a product of a priority and a number of flows belonging to a class for the each best-effort class, calculating a total priority of the best-effort class by calculating a sum of the products for the number of best-effort classes, calculating a basic volume allocation ratio for the received packet by dividing the priority of the class to which the flow of the received packet belongs by said calculated total priority, and calculating the basic volume of the flow of the received packet by calculating the product of said calculated basic volume allocation ratio and the basic volume of the best-effort class in combination with other limitations set forth in the respective claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Jay can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cgs
August 8, 2007

Chirag G. Shah
Primary Examiner, 2616

CHIRAG G. SHAH
PRIMARY PATENT EXAMINER